

ABSTRACT

This invention provides a wet flue gas desulfurizer wherein the slurry oxidation tank is equipped with a return pipeline for returning a portion of the slurry to a position 5 at or near the bottom of the slurry oxidation tank, and an oxygen-containing gas is blown in at the discharge end of the return pipeline so as to divide the oxygen-containing gas finely by the action of the slurry returned through the return pipeline, and an oxygen-containing gas blowing device 10 for use in a wet flue gas desulfurizer wherein a fluid reservoir for an absorbing fluid is equipped with a delivery pipe for discharging the absorbing fluid so that its discharge end is open in the fluid reservoir, and an oxygen feed nozzle for injecting an oxygen-containing gas is 15 disposed in the area of the discharged stream in the neighborhood of the discharge end of the delivery pipe.

According to the present invention, unduly great power is not required to agitate the slurry within the slurry oxidation tank, the efficiency of utilization of the injected 20 oxygen can be enhanced, the number of feed nozzles can be markedly reduced, and the capacity for agitating and dispersing the absorbing fluid can be markedly improved.